

REPORTS AND ENQUIRIES

Forestry and Rural Employment in Great Britain

In the present article those sections of the annual reports¹ of the Forestry Commission of Great Britain are summarised which refer to labour and employment. By way of preliminary explanation it may be stated that the Forestry Commission was set up by the Forestry Act of 1919 and provided with a fund of £3,500,000 to cover the work of the first ten years, including education and research.² Among other objects they were to secure the increased employment and increased production which follow the conversion of waste land or poor pasture into forest. In all 150,000 acres are to be planted or replanted by 1929.

The employment policy of the Commissioners must be treated under two distinct heads : temporary relief work for unemployed persons, and permanent work for a small number of rural workers, domiciled in or near the forests. In the last direction the scheme of workers' holdings pursued by the Commissioners is much the most interesting part of their policy. On the subject of unemployment relief less requires to be said. The operations undertaken were in no way exceptional. Out of a grant of £250,000 from the Vote for the Relief of Unemployment the Commissioners provided, during the winter of 1921-1922, about 30,000 man-weeks of employment, in addition to their normal programme, on their own properties, and a good deal of extra employment in Crown forests (the administration of which they have taken over), while 45,000 man-weeks were also provided on properties of other bodies or of private individuals in virtue of grants administered by the Commissioners.³ Work continued, on nearly as extensive a scale, in subsequent years. The Commissioners stated in 1922 : " It is believed that the work accomplished is of a productive character and that its efficiency (i.e. the proportion of the government grant actually expended in wages) is higher than in any other form of relief work. "⁴ Grants varied according to the character of the operations and according to whether the recipients were corporate bodies or private individuals, from £2 to £4 10s. per acre.

Early in the course of their operations the Commissioners summed

¹ FORESTRY COMMISSION : *Annual Reports* (for the period ending 30 September of each year), Nos. 2-7. London, H.M. Stationery Office, 1922-1927.

² *Fifth Report*, p. 4. The original recommendations of the reconstruction period will be found in MINISTRY OF RECONSTRUCTION, RECONSTRUCTION COMMITTEE, FORESTRY SUB-COMMITTEE : *Final Report*. Cd. 8881. London, 1918. 105 pp. 1s.

³ *Third Report*, pp. 29-30.

⁴ *Ibid.*, p. 30.

up their views on some of the general possibilities of employment in connection with forestry work in a few pages of considerable interest.¹ In their view employment "has a definite standing" as one of the advantages of an afforestation policy, but it has to be borne in mind that in itself "it does not constitute the complete justification". An afforestation policy must look a long way ahead, and the periods during which labour will be required are distinct. There is an initial clearing, draining, fencing, and then planting, period, lasting two and perhaps three years; then, after an interval, which varies from 15 to 30 years, thinnings will begin, and these will be repeated at intervals of 5 or 10 years, until the period of clear fellings arrives at anything from 30 to 80 years after planting; after that the forest is gradually worked into a permanent condition, offering permanent occupation.

It is therefore obvious that if continuous employment is to be offered to workers on an afforestation scheme there must be very large areas of land at the disposal of the employing authorities; a reserve provision of plants is also required. In fact, the ideal policy, from the social point of view, is to have large "stores" both of land and of plants and to regulate the amount of unemployment in the country; that is to say, the afforestation policy would be subordinated to the employment policy. It is the peculiarity of the situation that both land and plants can be stored in this way. The Commissioners envisaged such a policy, but were hampered in carrying it out owing to the general call for national economy after the war.

The immediate increase in volume of employment over that available, e.g. in a district of hill farming, can be during the first, or clearing and planting, period as much as 60 or 70 per cent. For a fully developed area employment can be provided for one man per 40 or 50 acres (this includes transport and sawing); but the figures vary greatly, as comparison with figures taken from German official publications show. The Commissioners have not hesitated to afforest hill grazings, where necessary, thereby increasing the amount of eventual permanent production and employment "ten-fold"², but at the cost of disturbing the sheep farmers during a period when sheep carried a high value; however, the difficulty of finding waste land which was plantable forced this policy on the Commission in Scotland.³ Elsewhere, e.g. in Norfolk, there was ground available "which had for many years produced nothing but rabbits, and many of the homes and farms had been abandoned". Here 20 cottages and small farms are now occupied, and a

¹ *Ibid.*, pp. 31-34. Cf. also *Report of the Forestry Sub-Committee of the Reconstruction Committee*, pp. 48-50. This Sub-Committee did not contemplate the finding of a large amount of employment for unemployed persons during a trade depression, but based their estimates of employment on the principle of permanent work for domiciled workers.

² This is no doubt based on the original rough estimate of production and employment for hill grazing, given by the Forestry Sub-Committee of the Reconstruction Committee in their *Report*, p. 28, where 1,000 acres of hill are estimated to require the services of one, or at most two, shepherds and to produce annually per acre less than 10 lbs. of mutton and 2 lbs. of wool.

³ *Fifth Report*, p. 5.

further 27 workers' holdings are being constructed, so that, in general, the work "has been of the utmost benefit to the rural population".¹

Employment is, of course, principally during the winter. The following table² shows the variation in volume of employment from winter to summer, on the properties of the Commission. It should be borne in mind that the winter employment programme has been largely constituted so as to give the maximum temporary employment to unemployed persons.

TOTAL EMPLOYMENT IN THE COMMISSION'S FORESTS, 1920-1926

Summer (minimum)		Winter (maximum)	
Date	Number employed	Date	Number employed
1920	210	1920-1921	935
1921	495	1921-1922	1,780
1922	525	1922-1923	1,775
1923	880	1923-1924	2,220
1924 ¹	1,620	1924-1925	2,650
1925	1,980	1925-1926	2,960
1926	2,335	1926-1927	3,185

¹ N.B. — 450 employees were transferred to the Commission with the Crown Woods on 1 April 1924.

A special feature of the Commission's policy is the forest workers' holdings³, first started in 1924, and therefore running for rather less than two-and-a-half years by the date of writing of the Commission's last report. These holdings have attracted some attention in England and are certainly a very interesting feature. The idea is to provide a holding up to 10 acres of light cultivable land⁴, a house, and 150 guaranteed days' forestry labour in the course of the year. The 150 days' work are a guaranteed minimum, and can be exceeded if necessary; in addition, it is assumed that the worker-holder will be able to obtain paid employment, especially at times of harvest on neighbouring farms.⁵ This is the Commission's attempt to supply themselves with the necessary reserve of labour during the winter, but without the grave social disadvantage of encouraging, or even of creating, a large supply of casual labour. The same situation has developed automatically in countries where natural forests are extensive; in Sweden, for instance, the winter forestry work attracts thousands of smallholders, who spend the summer months in agricultural operations on their own holdings or on large farms. In Great Britain,

¹ *Ibid.*, p. 6.

² *Seventh Report*, p. 44.

³ *Fifth Report*, pp. 8, 33.

⁴ Slightly exceeded by the addition of a few acres of rough grazing in districts where land is very light.

⁵ *Sixth Report*, p. 30.

owing to the limited extent of the forests, it at present seems possible to secure forest workers' holdings in or near forest areas; the Commissioners note that most plantable areas which they have acquired have included some agricultural land and often quite a fair number of habitations, now deserted. With domicile provided the last feature of casualisation vanishes and a permanent addition to the rural population is secured. Also, the Commissioners argue that the worker-holder has every chance of improving his standard of living.

The Commissioners aim at creating one such holding for every 200 acres of land afforested. By the end of the 10-year period, 1929, 750 could be completed. But the number of holdings could be increased to 3,000 or 4,000 during a succeeding 10-year period.¹ The situation on 30 September 1925 and 1926 was as follows² :

PROGRESS IN FORMATION OF HOLDINGS, 1925 AND 1926

Holdings	At 30 Sept. 1925	At 30 Sept. 1926
In course of formation :		
Equipped with new buildings	81	93
Equipped with adapted or reconditioned buildings	56	81
Total	137	174
Completed :		
Equipped with new buildings	3	63
Equipped with adapted or reconditioned buildings	58	123
Total	61	186
Occupied	52	183
Total number of holdings	198	360

The maximum allowable expenditure on each new dwelling place is £800, and on the land £150. The average actually spent was well below this. On a large number of holdings existing accommodation has been repaired and adapted. Houses have been built of timber, steel, concrete blocks, and reinforced concrete with timber framing; they normally include three bedrooms, living room, and kitchen-scully.³

¹ *Seventh Report*, p. 11. The Commissioners hold it a matter for consideration whether the density of holdings could not with advantage be increased as thinning processes begin. *Ibid.*, p. 42. The original Reconstruction Forestry Sub-Committee had contemplated a much larger number of holdings, leading eventually to the settlement on the land of 125,000 persons; see their *Report*, p. 49.

² *Seventh Report*, p. 40.

³ *Seventh Report*, p. 42.

A rent of 3s. is charged for the house¹, which is far below the economic value of a country cottage, but agrees with the value put on a cottage provided by a private employer for his farm workers by committees acting under the Agricultural Wages (Regulation) Act, 1924. Rent is further charged on the land. It is to be remarked that there is a demand for the smallest "cottage holding" of 3 acres or thereabouts. This involves less risk to the worker's savings. The Commissioners point out the advantage of securing one holder for each group of holdings who is prepared to tenant a larger holding and keep a pair of horses which he can lend to his neighbours. Holdings are held on yearly tenancies.² This is an important point, as a contract of labour is simultaneously entered into.

A few remarks are here added on an early investigation³, carried out on the Commissioners' properties, which bears on the problem of the scientific organisation of agricultural labour. The Commissioner in 1921 appointed a "Co-ordination Officer" in order to secure economy in material and in labour. Extensive use was made of the time-study method. An example is as follows.

It was found that an unsatisfactory gang of planters, while apparently planting steadily at the rate of 90 plants per hour per man, actually only got 450 trees per man planted during an 8-hour working day, i.e. they were doing 5 hours' effective work during an 8-hour day and losing 3 hours. This lost time (per man per day) was found to be composed as follows :

	Minutes
(i) Walking to and from meals	40
(ii) Walking time (between finish of one line and commencement of next)	30
(iii) Time (additional to (ii)) spent in setting pickets to assist in keeping lines straight	30
(iv) Delays at beginning and end of lines	30
(v) Various delays (waiting for plants, resting, smoking, talking, etc.)	50
Total	3 hours

The above items were attacked singly and waste eliminated as far as possible ; e.g. a shelter was provided on the spot for meals, the men were trained to discard pickets, etc.

Further analysis of each individual operation was made with a stop-watch, and gave the following results for the best and the worst man respectively :

Process	Time per plant (seconds)	
	Best man	Worst man
Surface preparation	9.4	7.0
Opening notch	5.7	6.1
Inserting plant	5.3	3.2
Firming plant	4.9	2.8
Walking	15.7	21.9
Total	41.0	41.0

¹ *Sixth Report*, p. 29.

² *Seventh Report*, p. 41.

³ *Second Report*, pp. 31-32.

"It is obvious that the worst man was taking his time between plants, and therefore had to scamp the planting work in order to keep pace with the gang."

In general, while it is obviously necessary to avoid lost time on the scale indicated, it is also very necessary in forestry not to sacrifice quality to speed. It is, however, interesting that the report notes the disadvantage of too high a standard of clearing, causing unnecessary expense. Workers have to be trained not to exceed the degree of clearing judged necessary for the particular type of planting contemplated.

Piece work under control was found useful, any scamped work having to be redone by the worker without remuneration. Experience has emphasised the importance of conducting carefully arranged experiments to determine for each area the most suitable planting method and the precise pattern, shape, and weight of tool to be used, and of instructing planters in their use. Many of the tools on the market are not suitable for efficient planting work, while custom often stands in the way of introducing tools more suitable than those locally in use.

Labour Conditions in the Philippine Islands

The Philippine Bureau of Labour has issued a short account of labour conditions in the Philippine Islands on the basis of the legislation in force and of the Bureau's annual reports and records.¹

GENERAL

The estimated population of the Philippine Islands in 1926 was 12,108,688. The native population, amounting to over 99 per cent. of the total, is of Malay race with some admixture of Spanish, American, and Chinese blood. The largest foreign element is the Chinese, who at the 1918 census numbered 43,802.

The following table shows the total number of wage earners in the Islands :

Occupational group	Males	Females	Minors	Total
Agricultural	1,299,154	607,176	641,242	2,547,572
Fishing industry	50,307	99	424	50,830
Forestry	11,677	—	86	11,763
Trades and industries	99,568	11,624	1,979	113,171
Mines	3,032	—	5	3,037
Commerce and transportation	117,845	329	4	118,178
Employees of the Insular Government	12,777	62	11	12,850
Grand total	1,594,360	619,290	643,751	2,857,401

¹ *Labour* (Bulletin of the Bureau of Labour), Vol. VIII, No. 26, March 1927, Manila.